

MISCELLANEOUS NOTES

reduced in numbers. Even the once common kingfishers were absent.

In the 1960's the mercury vapour lamp on the compound of the Ahwa ST stand attracted a great variety of moths and other insects, lizards, frogs, bats and other small insect-eating animals. In 1976 this same lamp attracted only a few of these; however, one partial explanation might be the presence of many powerful electric lights now in the town. Still very few species of moths, butterflies, and skippers were observed throughout the Dangs. Also the depletion of flowering plants has no

doubt contributed to the decreased number of Lepidoptera.

Nature—even when left undisturbed—maintains a sensitive balance between the flora and fauna. Man is the culprit responsible for upsetting the natural order. The very survival of *Homo sapiens* most likely depends on the balance of nature being preserved. After all, the future of the earth might be with the insects rather than with man. Can man survive? That question will be raised more seriously by the time man enters the twenty-first century.

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ERNEST M. SHULL

2. A NOTE ON THE TIGER CENSUS CONDUCTED IN GUJARAT STATE FROM 15TH TO 21ST APRIL, 1979

A census of tigers in the Gujarat State was carried out from 15th to 21st April, 1979. A brief account of the same is given below.

Initially, the following potential tiger areas of the State were proposed to be covered during the census:

This census area covered a total of 275 beats, the beat being the territorial unit for the census.

Detailed cyclostyled instructions in the vernacular on the census methodology were supplied to each Beat Guard. The period from 3rd to 5th April was earmarked for collecting preliminary census information so as to determine the areas where tigers or their signs were reported during the last 12 months. On the basis of this information, the final census was confined to the following areas:

NAME OF CIRCLE	NAME OF FOREST DIVISION	NAME OF RANGE
Surat	Dangs (North)	All Ranges
	Dangs (South)	—do—
	Valsad	Bansda (including the Bansda National Park areas). Pangarbari and Fatepur
	Vyara	Vajpur Range covering Satkashi forest
	Rajpipla (West)	Mandvi (North) Mandvi (South)
Gandhinagar	Rajpipla (East)	Dediapada, Fulsar, Piplod, Rajpipla, Sagbara.
	Banaskantha	Danta and Ambaji.

Dangs (North) and Dangs (South) Divisions; Bansda Range of Valsad Division; Rajpipla Range of Rajpipla (East) Division and Ambaji Range of Banaskantha Division. Throughout the census week, each Beat Guard within the census area did intensive patrolling within his jurisdiction (with the help of hired trackers where necessary), specifically for the purpose of detecting signs of tiger movement in his area (such as actual sighting, pugmarks, droppings, kills, etc.). Any positive report received from them were immediately verified on the spot by a responsible officer (Range Forest Officer, Asst. Conservator of Forests or Dy. Conservator of Forests). Wherever pugmarks were found, they were recorded on a tiger tracer indicating the location and time. A blueprint showing the actual size samples of tiger pugmarks (male, female and cub) were supplied to each Beat Guard for his guidance in the field and to eliminate the possibility of panther pugmarks being mistaken for a tiger's.

In all, 11 cases of direct or indirect tiger sightings were reported at the end of the census period from Dangs (North), Dangs (South) and Rajpipla (East) Divisions, of which only 7 were finally accepted as enumerated below:

Thus, in the final analysis, it can definitely be recorded that there were 7 tigers in Gujarat State during the census period from 15th to 21st April, consisting of 4 males and 3 females distributed over the following divisions:

Dangs (North) : 3 males and 2 females
Dangs (South) : 1 female
Rajpipla (East) : 1 male

Advantage of this tiger census was also taken to estimate the population of panthers in Dangs District, i.e. Dangs (North) & Dangs (South) Divisions. These observations indicate that there are approximately 70 panthers in

this District, which can be considered to be a fairly substantial number.

During the last all India Tiger Census conducted in 1972, 8 tigers had been reported from Gujarat State, all of them from Dangs District. As against this, the present census has indicated the existence of 6 tigers in Dangs District and one in Rajpipla (East) Division (Bharuch District). It appears quite obvious that the tiger in Gujarat is struggling for survival and its population in the State is on the decline. The main adverse factors which the tiger has to face may briefly be enumerated as under:

A steady reduction and constant human disturbance in its habitat. Among the more serious causes of disturbance may be mentioned the industrial exploitation of bamboos, intensive management of the forest (particularly in Dangs), the collection of minor forest produce by the tribals resulting in recurring forest fires, and the heavy depletion of wild ungulate population due to persistent poaching by the tribals, particularly during the critical summer months. With hardly any natural prey left for the tiger, it is compelled to turn to domestic cattle. But here also he has to face severe competition because the moment a kill is detected, the local tribals rush in to drive the tiger away from his kill and to appropriate the meat for their own consumption. It is virtually impossible for the tiger to survive under these conditions, although the panther can always manage to eke out a living even under such unfavourable conditions.

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Digveerendrasinhji and Shri K. J. Khan who ungrudgingly spared their valuable time and took a lot of trouble at considerable personal discomfort to tour the forest areas extensively for the verification of pugmarks, etc.

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(WILDLIFE), GUJARAT STATE,
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July 16, 1978.

M. A. RASHID

3. OCCURRENCE OF CIVETS IN THE CITY OF RANGOON (BURMA)

During the war period (January 1942—May 1945) as I returned home late one night from the Orient Club on the Royal Lakes (Kandawgyi), I saw in the beam of my car light a large Civet which ran across the road in the Golden Valley area.

Since 1954, I have been residing in the Inya Myaing area which adjoins the Golden Valley area. Inya Myaing is 4½ miles from the General Post Office, Strand Road. Adjoining my compound on one side is The International Meditation Centre. The compound is over an acre in area with a number of large trees. I planted a number of plum and guava trees around my cottage. The branches of these trees drop on the roof of my cottage.

A few years after our arrival, a large Civet took up its abode under the roof of my cottage. It climbed to its abode by a guava tree. It came to its abode early in the morning and left its abode to feed at dusk. I saw the Civet resting on the roof on one or two occasions during the day. It had black stripes on the back, the long tail also being banded with black and could have been the banded palm civet (*Hemigalus derbyanus* Gray).

After the disappearance of this civet and a break of several years a pair of civets took

up their abode under the roof of my cottage. They climb to the roof and descend from the roof by a plum tree. They leave their abode to feed between 1900 and 2000 hrs. and return to the abode between 0400 and 0500 hrs. next morning. We know when they leave and when they return by the noise they make when moving about and by the noise caused by the branches of the plum tree striking the roof.

They were not much of a nuisance at first. But in 1977 they bred two young. They are a nuisance now from the cries of the young and from their urine. The urine drips through the ceiling down to the floor all over of my cottage and is not confined to one place only. It has a very strong odour and the floor has to be washed immediately before it dries up.

I have sat up at night fall as well as early in the morning on several occasions but have not been fortunate to observe any of the civets. On one occasion during the day I observed two tails dropping down through an aperture in the ceiling. The tails are not banded. The house maid, however, has been fortunate. She observed through a window in her dormitory the two adults coming down from the abode at night fall and returning to the abode early